

2 a memory to store images of an image frame in a plurality of memory pages;
3 a processor to perform drawing operations to generate the images for the image frame,
4 the processor marking memory pages corresponding to regions of the image frame that have
5 been updated; and
6 a display controller in communication with the memory to access the image frame and to
7 send only the marked memory pages of the image frame to the display to refresh the display.

1 4. (Amended) The system of claim 3, wherein the image frame is divided into tiles
2 representing two-dimensional regions of the image frame, each of the tiles is stored in one
3 separate memory page.

1 5. (Amended) The system of claim 3, wherein each of the memory pages has a size
2 of four Kilobytes.

1 6. (Amended) The system of claim 3, wherein the image frame is represented by a
2 configuration where color components of a pixel are deposited in contiguous memory locations.

1 7. (Amended) The system of claim 3, wherein the image frame is represented by a
2 configuration where color components of a pixel are separated and deposited in multiple color
3 planes.

1 8. CANCELLED

1 9. CANCELLED

1 10. (Amended) A method to refresh a display, comprising:
2 storing at least one image frame such that content of the image frame is stored in a
3 plurality of memory pages in a memory;
4 marking memory pages corresponding to regions of the image frame that have been
5 updated while performing drawing operations; and
6 sending only the marked memory pages of the image frame to the display to refresh the
7 display.

1 11. (Amended) The method of claim 10 further comprising:
2 dividing the image frame into tiles representing two-dimensional regions of the image
3 frame, and
4 storing each of the tiles in one separate memory page.

1 12. (Amended) The method of claim 10 further comprises using memory pages of
2 four Kilobytes in size.

1 13. (Amended) The method of claim 10 further comprises organizing the image
2 frame using a configuration where color components of a pixel are deposited in contiguous
3 memory locations.

1 14. (Amended) The method of claim 10, further comprises organizing the image
2 frame using a configuration where color components of a pixel are separated and deposited in
3 multiple color planes.

1 15. (Amended) A program embodied on a system-readable medium to refresh a
2 display, comprising:
3 a first sub-program to control storing at least one image frame in a memory such that
4 content of the image frame is stored in a plurality of memory pages in the memory;
5 a second sub-program to mark memory pages corresponding to regions of the image
6 frame that have been updated while performing drawing operations; and
7 at least one sub-program to access the image frame and to send only the marked memory
8 pages of the image frame one memory page at a time to the display to refresh the display.

1 16. CANCELLED

1 17. CANCELLED

1 18. The program of claim 15 further comprising:

2 a third sub-program to divide the image frame into tiles representing regions of
3 the image frame and to store each tile in a separate memory page.

1 19. The program of claim 15 further comprising:
2 a third sub-program to organize the image frame using a configuration where color
3 components of a pixel are deposited in contiguous memory locations.

N/K
2 20. The program of claim 15 further comprising:
3 a third sub-program to organize the image frame using a configuration where
color components of a pixel are separated and deposited in multiple color planes.

a3
1 21. (New) The system of claim 3, wherein the display controller sends the image
2 frame one memory page at a time to the display to refresh the display.

1 22. (New) The method of claim 10, wherein the sending of the marked memory
2 pages of the image frame to the display to refresh the display further comprises sending the
3 marked memory pages one memory page at a time.